



**Introduction**

The MP Charge Controller Bracket (MP-CCB) enables you to mount charge controllers to a Magnum enclosure. It can be easily attached to either the left or right side of the Magnum MMP (Mini Magnum Panel) or MP (Magnum Panel) enclosure. This bracket is designed to work with a Magnum Energy PT-100 charge controller and other common charge controllers on the market. The MP-CCB comes with the necessary hardware to secure this bracket to an enclosure and to attach a controller to the bracket (see Figure 1).

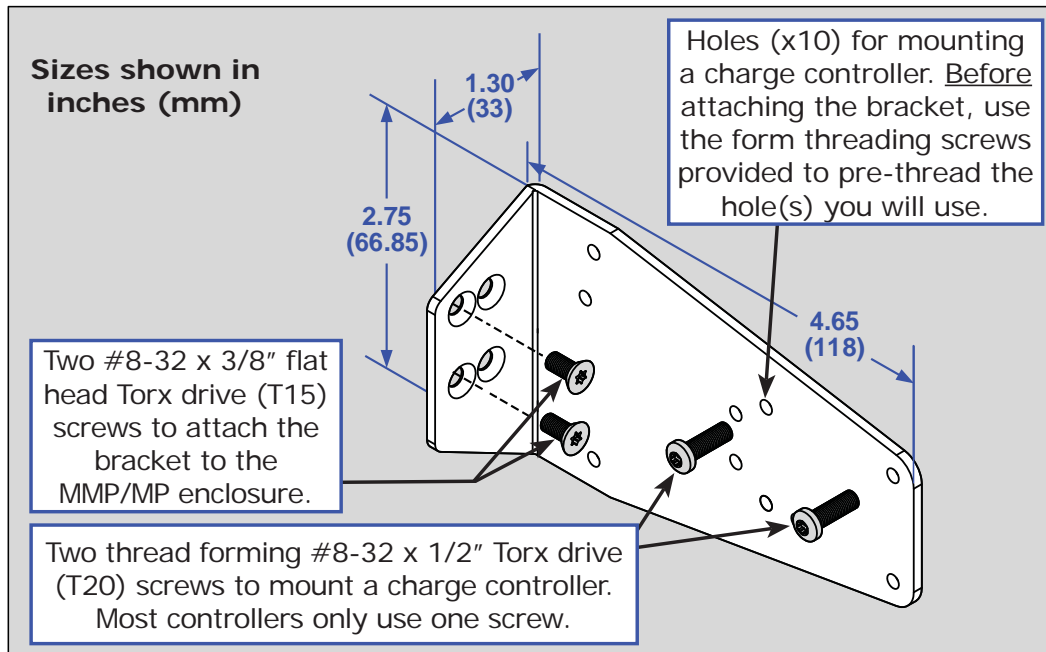


Figure 1, MP-CCB Physical Dimensions

**Installation**

- Before proceeding, use Table 1 to determine for your particular charge controller:
- which side of the enclosure (left or right) to mount the charge controller,
  - which enclosure mounting holes (upper or lower) to use to attach the bracket,
  - which bracket hole(s) (A-I) to use to mount the charge controller (see Figure 2).

Table 1, Mounting Holes Used for Charge Controllers

Charge Controller	Holes to use: (Bracket) / [Enclosure]	
	Left-side Install	Right-side Install
PT-100 (ME)	(I) / [upper]	(H) / [upper]
Classic w/o Turbo (MN)	(B) / [upper]	(F) / [upper]
Classic w/Turbo (MN)	(A) / [upper]	(F) / [upper]
FlexMax 80 (OB) <sup>1</sup>	NA	(G) and (E) / [upper]
Tristar (MS)	(D) / [lower]	(C) / [lower]

(ME) = Magnum Energy, (MN) = MidNite, (OB) = OutBack, (MS) = MorningStar

**Note 1** - The FlexMax 80 is taller than most controllers and may not fit if something is mounted above it. If an MPX extension is to be installed on an MP enclosure, mount the MPX on the left side to allow the FlexMax 80 to be mounted on the right-hand side.

## MP-CCB Instruction Sheet

Refer to Figure 2 to locate the holes you will use to attach the bracket to the enclosure and to mount the controller to the bracket. Use the provided thread forming screws (T20 Torx drive) to pre-thread the selected mounting holes. It is easier to do this now rather than after it is installed.

After pre-threading the particular bracket hole(s), attach the bracket to the enclosure. Before you mount the charge controller to the attached bracket, remove the appropriate knockout from the side of the controller and an adjacent knockout on the side of the enclosure. This allows you to use a 1" close nipple with two locknuts to secure the charge controller to the enclosure (in addition to the bracket), and provides a path to run the necessary wiring between the two units. Mount the controller to the attached bracket using the supplied hardware. Insert the close nipple through the knockouts and secure with the locknuts.



**Info:** It may take three locknuts on the close nipple to anchor the controller to the enclosure. An additional locknut may be required between the enclosure and the controller to act as a spacer. Also, a standard 1" plastic bushing should be used on the nipple ends to protect the wire insulation as it enters/exits the nipple.

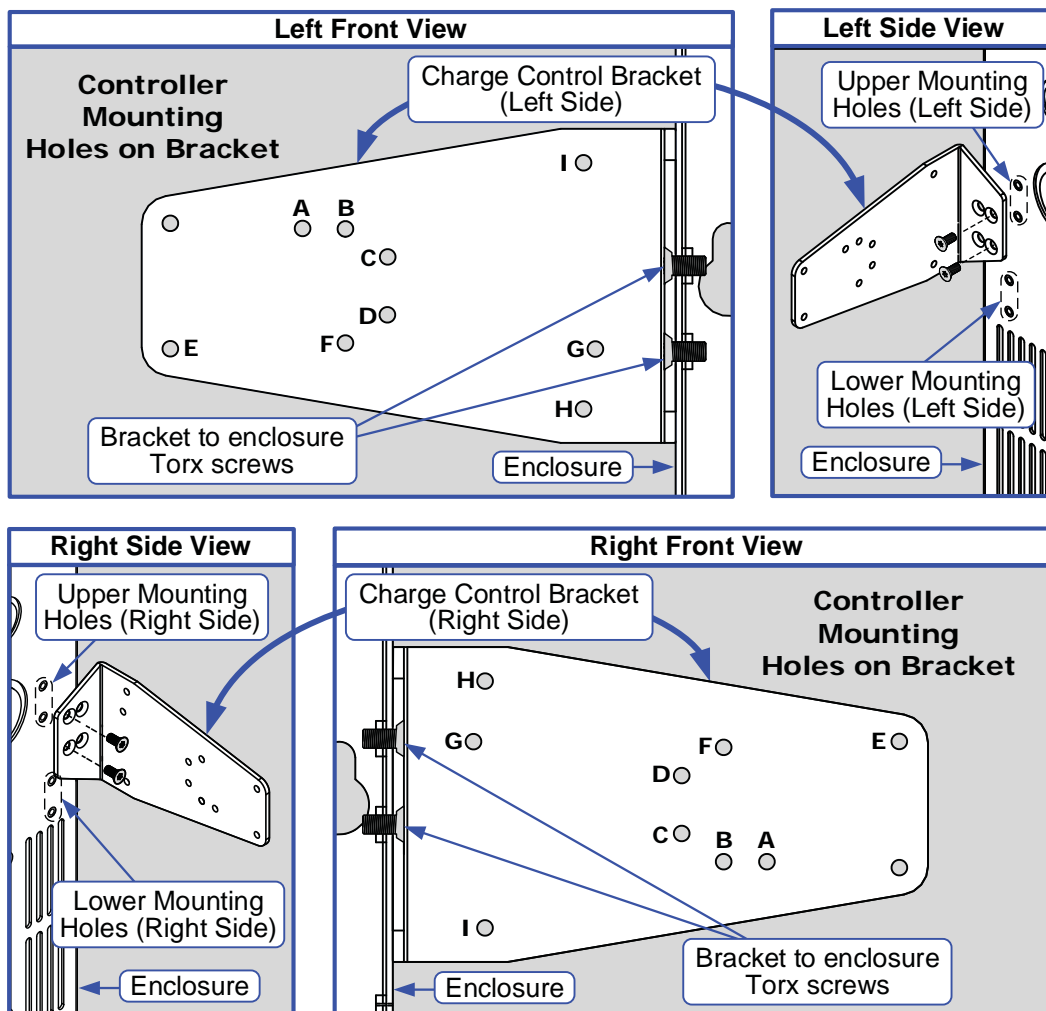


Figure 2, Mounting Holes